# DropArt Parts list

This is a list of the part required to build the DropArt project. All the parts bar one is available off the self. The exception to this is the end cap for the acrylic liquid vessel which I 3D printed. I can provide the 3D model for this end cap.

**Active components**

- PIC18F2550 microcontroller. As supplied, this is a non-programmed part so needs to be flashed with the DropArt firmware. If you have a suitable programmer you can do this yourself, or I can send you a pre-flashed part or you can send me a blank part for flashing.
- Blue serial IIC 20x4 character LCD module
- 78L05 voltage regulator
- AN25 opto-isolator or similar – 2 off
- MOC3020 opto-triac
- IRF9530 P-channel FET or similar
- TLS106 SCR Thyristor or similar
- LEDs 2 off

**Passive components**

- 1N4001 diode (reverse polarity protection)
- 100nf ceramic capacitors 3 off
- 22uf 16v electrolytic capacitor or similar 2 off
- 22pf ceramic capacitors 2 off
- 4MHz crystal HC49/4H leaded
- SIL 8 pin isolated resistor network 1.8K 2 off
- SIL 8 pin common resistor network 4.7k 1 off
- 470R 1/4W resistor 1 off
- 10K 1/4W resistor 2 off

**Connectors**

- 2.5mm board mount power socket
- 2.5mm chassis mount power plug/socket
- 2.5mm mono jack socket (solenoid)
- 3.5mm mono jack socket 2 off (shutter and flash)

- USB type B 90-degree DIP female socket
- Pin header 2.54mm 4 way
- DIL 28pin turned pin IC socket
- DIL 6pin turned pin IC socket 3 off

**Other**

- 12cm x 8cm FR-4 prototyping board through hole plated
- Push to make through hole miniature buttons
- Rotary encoder switch 2 bit Gray coded
- Control knob to fit rotary encoder

**Mechanics**

- Clear acrylic pipe 36mm OD 30mm ID and 18cm long
- End cap (3D print) to fit acrylic pipe OD 36mm
- Mariotte siphon type to fit bung centre by 16cm long
- Rubber bung size 29 with centre hole
- Barbed hose tail 1/4” thread x 4mm exist aperture
- BSPP female bulkhead fitting with fixing nut 1/4inch
- Barrel nipple 1/4inch
- 12V DC 4W electric solenoid valve air/gas/water/fuel normally closed 1/4inch two way


EVI 7/9
12V DC
6.5W 540mA
100% ED
IP 65


1/4" x 6mm
6mm
18.5mm
29.6mm
3.3mm
7.5mm
12.7mm
M1/4
4.3mm
9.8mm

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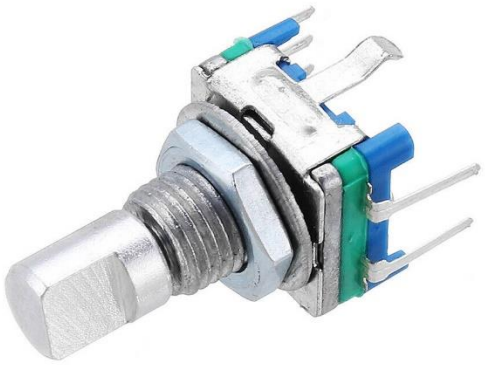
|  |  |